

WHAT IS CLAIMED IS:

1. A method for increasing channel utilization in a video broadcast system,
comprising:

receiving, at a head-end, a request for a video program from one of a plurality of
5 subscriber stations;

determining, at said head-end, whether said requested video program is associated
with one of a plurality of subsets of channels, wherein said plurality of subsets of channels
comprises a first subset of channels representing broadcasted channels having a first
subscriber viewership level greater than a threshold level, a second subset of channels
10 representing broadcasted channels having a second subscriber viewership level greater less
than said threshold level, and a third subset of channels representing on-demand channels
having a third subscriber viewership associated with video-on-demand;

causing substantially continuous transmission of said first subset of broadcast
channels from said head-end toward said plurality of subscriber stations;

15 causing transmission of said second subset of broadcast channels from said head-
end to said plurality of subscriber stations based upon availability of channels in said
second subset of channels and assigning video programming corresponding toward said
request to an available one of said second subset of channels; and

causing transmission of said third subset of on-demand channels from said head-end
20 toward said plurality of subscriber stations upon assigning video programming
corresponding to said request to an available one of said third subset of channels.

2. The method of claim 1 further comprising:
collecting information from each of the corresponding subscriber stations regarding
the frequency of channel usage and favorite channel selections; and
- 5 3. The method of claim 2, further comprising:
sending said collected information from said corresponding subscriber stations to a
broadcast interconnect manager for managing broadcast channels and the narrowcast
channels within a broadcast spectrum.
- 10 4. The method of claim 3, further comprising:
updating said plurality of subscriber stations with broadcast channel availability in a
form of a channel map.
5. The method of claim 4, wherein said updating said plurality of subscriber stations
15 with broadcast channel availability comprises:
associating program identity, channel frequency, program availability, and
analog/digital format for each broadcast channel.
6. The method of claim 5, wherein at each subscriber station, said method further
20 comprises:
determining whether said requested channel is in said channel map;
if so, tuning to said requested channel;

if not, adding said requested channel to said channel map in an instance where said requested channel is available from said head-end and tuning to said channel; and

providing indicia that said requested channel is unavailable for viewing in an
5 instance where said requested channel is unavailable.

7. The method of claim 4, further comprising:

sending a channel map modifier request to said subscriber station;

adding a new channel to said channel map at said subscriber station in an instance
10 said channel map modifier request comprises an add channel request.

8. The method of claim 7, further comprising

determining channel use of a channel listed in said channel map modifier request in
an instance said channel map modifier request comprises a delete channel request;

15 send a channel in use response to said head-end in an instance a channel associated
with said delete channel request is in use; and

otherwise, deleting said channel associated with said delete channel request.

9. The method of claim 1, further comprising:

20 transmitting said requested video program from said head-end to subscriber
equipment associated with said request, via a transmission network characterized by a

broadcast spectrum over which programs are transmitted to said plurality of subscriber stations.

10. The method of claim 1, wherein said broadcast spectrum comprises a semi-static
5 broadcast portion of n channels, an on-demand broadcast portion of m channels, and a narrow-cast portion of p channels, where m, n, and p are integers greater than one, said method further comprising:

allocating a plurality of channel slots for each of said portions of channels.

10 11. The method of claim 1, wherein said first subset of broadcast channels comprises high viewership of channels associated with said first subset, said second subset of broadcast channels comprises lower viewership of channels associated with said second subset, said method further comprising:

15 dynamically changing, at said head-end, broadcast channel association with said first and second subsets of broadcast channels in response to changes in subscriber viewership.